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(71) Applicant: **EMAGIN CORPORATION** [US/US]; 2070  
Route 52, Hopewell Junction, NY 12533 (US).

(72) Inventors: **SHI, Xiaobo**; 30 Mill Pond Lane, Poughquag,  
NY 12570 (US). **SOKOLIK, Igor**; RR2, Box 3, Route 82,  
Verbank, NY 12570 (US).

(74) Agent: **ZISK, Matthew, B.**; Skadden, Arps, Slate,  
Meagher & Flom LLP, Four Times Square, New York, NY  
10036 (US).

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ning of each regular issue of the PCT Gazette.*

(54) Title: ORGANIC LIGHT EMITTING DIODE DEVICES USING AROMATIC AMINE COMPOUNDS WITH HIGH AND TUNABLE GLASS TRANSITION TEMPERATURES

(57) Abstract: The present invention relates to a novel class of thermostable hole-injection and hole-transport compounds having tunable glass transition temperatures and ionizing potentials for use in organic light emitting diode ("OLED") devices. In particular, the compounds of the present invention comprise a trityl aniline core structure with various substituents attached to the nitrogen group, the structures of which allow for the adjustment of the glass transition temperatures and ionization potentials of the compounds. The present invention also relates to microdisplay devices comprising the compounds of the present invention in the hole-injection/hole-transport layers.

WO 02/001653 A3

# INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07C211/61 C07D209/86 H01L51/20 H01L51/30

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07C H01L C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

PAJ, EPO-Internal, WPI Data, BEILSTEIN Data, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 848 579 A (TOYO INK MFG CO) 17 June 1998 (1998-06-17) page 4, line 1 - line 24 table 1, compounds 6 and 9 ----	1-125
A	EP 0 924 192 A (CHISSO CORP) 23 June 1999 (1999-06-23) page 3, line 19 - line 56 -----	1-125

☐ Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

### \* Special categories of cited documents:

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- \*E\* earlier document but published on or after the international filing date
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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

O'Sullivan, P

## INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
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			EP	0848579 A2	17-06-1998
			US	5948941 A	07-09-1999
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EP 0924192	A	23-06-1999	JP	11236360 A	31-08-1999
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